

# SEAN BURGESS

[sgburgess687.github.io](https://sgburgess687.github.io) | [sgburgess687@gmail.com](mailto:sgburgess687@gmail.com) | Houston, TX

## Languages & Aptitudes

Python (NumPy, Pandas, Matplotlib, Seaborn, Scikit-Learn, PyTorch), SQL, Git, HTML, CSS, Tableau, MS Office

## Technical Skills

Regression (Linear, Logistic), Classification (K-NN, SVM, Random Forest), Data Visualization, Data Cleaning & Interpretation

## EDUCATION

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### University of Houston

*Graduated 2020*

Mathematics, B.S.

Minor in Economics

Courses: Computer Science & Programming (Python), Intro to Programming (C++), Computing for Engineers (MATLAB), Advanced Linear Algebra, Probability, Statistics, Stochastic Processes

### Udacity

*In Progress*

Deep Learning Nanodegree

Skills Covered: Deep Learning, Neural Networks, CNNs, RNNs, GANs

## PROJECTS

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### Counter Strike Classification using CNNs

[Link](#)

- Classified images of weapons from a video game using convolutional neural networks
- Implemented a CNN from scratch as well as from transfer learning

### Bayesian Analysis in Predicting Overconfidence

[Link](#)

- Simulated a population of entrepreneurs distributed among three skill types
- Tested a multitude of scenarios in which the entrepreneurs learn from prior experience
- Analyzed perceived skill distribution to predict overconfidence

### Currency Crises

[Link](#)

- Combined two large data sets from the World Development Indicators DataBank
- Trained decision trees and identified accurate classifiers in MATLAB
- Predicted currency crises within rich countries

## EXPERIENCE

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### Mathematics Tutor

*Current*

*FindTutors, Peer Tutoring*

- Tutor in all areas of mathematics up to a high school level, such as pre-calculus and statistics
- Tutor former peers and colleagues in university level mathematics, such as probability and calculus

### Assistant Manager

*December 2017 - September 2018*

*Nekter Juice Bar*

- Directed and managed team members
- Counted cash drawer and logged daily profits